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DATE: June 22, 2004

PTO IDENTIFIER: Application Number 10/791,732-Conf. #5305  
Patent Number

Inventor: Nicola Bresciani et al.

MESSAGE TO: US Patent and Trademark Office

FAX NUMBER: (703) 872-9306

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PAGES (Including Cover Sheet): 7

## CONTENTS:

Transmittal Letter (1 page);  
Modified Abstract of Disclosure (1 page)  
Copy of European Communication dated 06/14/2004 (3 pages);  
Certificate of Transmission Under 37 CFR 1.8 (1 page)  
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PTO/SB/97 (12-97)

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Docket No.: 22106-00054-US  
(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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JUN 23 2004

In re Patent Application of:  
Nicola Bresciani et al.

Application No.: 10/791,732

Group Art Unit: 2832

Filed: March 4, 2004

Examiner: Not Yet Assigned

For: A LOW-VOLTAGE CIRCUIT BREAKER AND  
CORRESPONDING POSITIVE-OPENING-  
OPERATION DEVICE

OFFICIAL

TRANSMITTAL LETTERCommissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicant is in receipt of communications from the European Patent Office ("EPO") dated June 14, 2004 advising that the Abstract of Disclosure in the corresponding European patent application was modified by the Search Division of the EPO. Applicant submits the modified Abstract of Disclosure for filing in the above-identified corresponding U.S. patent application. A copy of the EPO communication received is enclosed for your reference.

Enclosed are the following items for filing in connection with the above-referenced Patent Application:

## 1. Modified Abstract of Disclosure

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0185, under Order No. 22106-00054-US.

Dated: June 23, 2004  
21056\_1

Respectfully submitted,

By Myron Keith Wyche  
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Europäisches  
Patentamt

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in Den Haag  
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abteilung

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Datum/Date

14.06.04

|                                                                                                |                                                                                                      |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Zeichen/Ref./Ref.<br><b>ABB00301-EP</b>                                                        | Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.<br><b>04075646.2-2214-</b> |
| Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire<br><b>ABB Service S.r.l.</b> |                                                                                                      |

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☐ abstract

☒ title

☒ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 1

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 04 07 5646

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                  |                                                 |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Citation of document with indication, where appropriate, of relevant passages                                                                                    | Relevant to claim                               | CLASSIFICATION OF THE APPLICATION (InCl.7) |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US 5 260 533 A (STAY AMELIA M ET AL)<br>9 November 1993 (1993-11-09)<br>* column 7, lines 45-60; figures 2,3,23 *<br>* column 15, line 53 - column 16, line 12 * | 1-13                                            | H01H71/50<br>H01H71/52                     |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US 5 250 918 A (EDDS THOMAS A ET AL)<br>5 October 1993 (1993-10-05)<br>* column 8, lines 36-54; figure 1 *                                                       | 1,12                                            |                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                  |                                                 | TECHNICAL FIELDS SEARCHED (InCl.7)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                  |                                                 | H01H                                       |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                  |                                                 |                                            |
| Place of search<br>Munich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                  | Date of completion of the search<br>26 May 2004 | Examiner<br>Simonini, S                    |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                  |                                                 |                                            |

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EPO FORM 1503 (03.02.1994)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 07 5646

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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26-05-2004

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EPO FORM P459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



## ABSTRACT / ZUSAMMENFASSUNG / ABREGE

04075646.2

Described herein is a low-voltage circuit-breaker, which comprises at least one mobile contact (10) and a corresponding fixed contact, and a positive-opening-operation device. The positive-opening-operation device in turn comprises: a moving element (40) associated to the mobile contact; a first kinematic chain (50), operatively associated to said mobile contact and to an actuating device; and a second kinematic chain (60), associated to said moving element and to said first kinematic chain. A first lever (51) is associated to the first kinematic chain and a second lever (61) is associated to the second kinematic chain, said first and second levers interacting with one another during the opening operation and being equipped with blocking devices (70) in the event of welding of the contacts together.